

Work Order ID 89999

89999

Page 1

September-13-12 9:11:46 AM

Item ID: D3793-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Wearshoe

Start Date: 9/13/12 Start Qty: 8.00

8

Cust Item ID:

Required Date: 10/05/12 Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3793	Rev A

100

0.00

100

FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3793 Dwg Rev: A Prog Rev: 2
Deburr if necessary

13 0 Jm 12-9-15

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

13 0 Jm 12-9-15

120

QC8- Inspect parts - second check

0.00

120

QC

Memo

0.00

Quality Control

SmB
10-9-17

13

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 89999

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Page 2

September-13-12 9:11:47 AM

Item ID: D3793-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearshoe
 Start Date: 9/13/12 Start Qty: 8.00 *8* Cust Item ID:
 Required Date: 10/05/12 Req'd Qty: 8.00 *8* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Brake NC Brake NC	NC BRAKE Memo 1-Deburr if necessary2-Form on Brake as per Dwg D3793 using Jigs 3-Form Joggle on brake using Jig as per Dwg D3793	0.00 0.00				13x			<i>P</i> 12/09/26 12/09/26
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				13			<i>Smb</i> 12.9.26 / <i>DAS</i> 16 12/09/26
150 *150* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 Memo START TIME: 2:20 FINISH TIME: 3:20 OVEN TEMPERATURE: 2:50	0.00 0.00				13X			<i>m</i> 12/09/26

m121279

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 89999

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Page 3

September-13-12 9:11:47 AM

Item ID: D3793-1 Accept *N900040100* Setup Start *NS1*
 Revision ID: Stop *NS2*
 Item Name: Wearshoe
 Start Date: 9/13/12 Start Qty: 8.00 *8* Cust Item ID:
 Required Date: 10/05/12 Req'd Qty: 8.00 *8* Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							
160						13	φ	12-9-26	34
QC	Memo	0.00							
Quality Control									
170	Identify as per dwg & Stock Location: <i>FR1</i>	0.00							
170						13	φ	12-9-26	
Packaging	Memo	0.00							
Packaging									
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.00							
Quality Control									

MLJ 12-09-27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY				
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Picklist Print

September-13-12 9:11:46 AM

Page 1

Work Order ID: 89999

Parent Item: D3793-1

Parent Item Name: Wearshoe

Start Date: 9/13/12

Required Date: 10/05/12

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP Rev:A 08-05-13 new issue DD verified by:EC
IPP Rev:B 08-05-23 revA as per dwg DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304S20GA

304/316 .040 Sheet

Purchased

No

100

sf

389.7500

0.5902

~~4.970~~0.56

5.0

Jm 12-9-15

Location

Loc Qty

Loc Code

MAT020

389.7500325

121380

0.0000325

122732

58

122736

24

122753

307.75

122753

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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DART AEROSPACE LTD		Work Order:	89999
Description: Wearshoe		Part Number:	D3793-1
Inspection Dwg: D3793 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

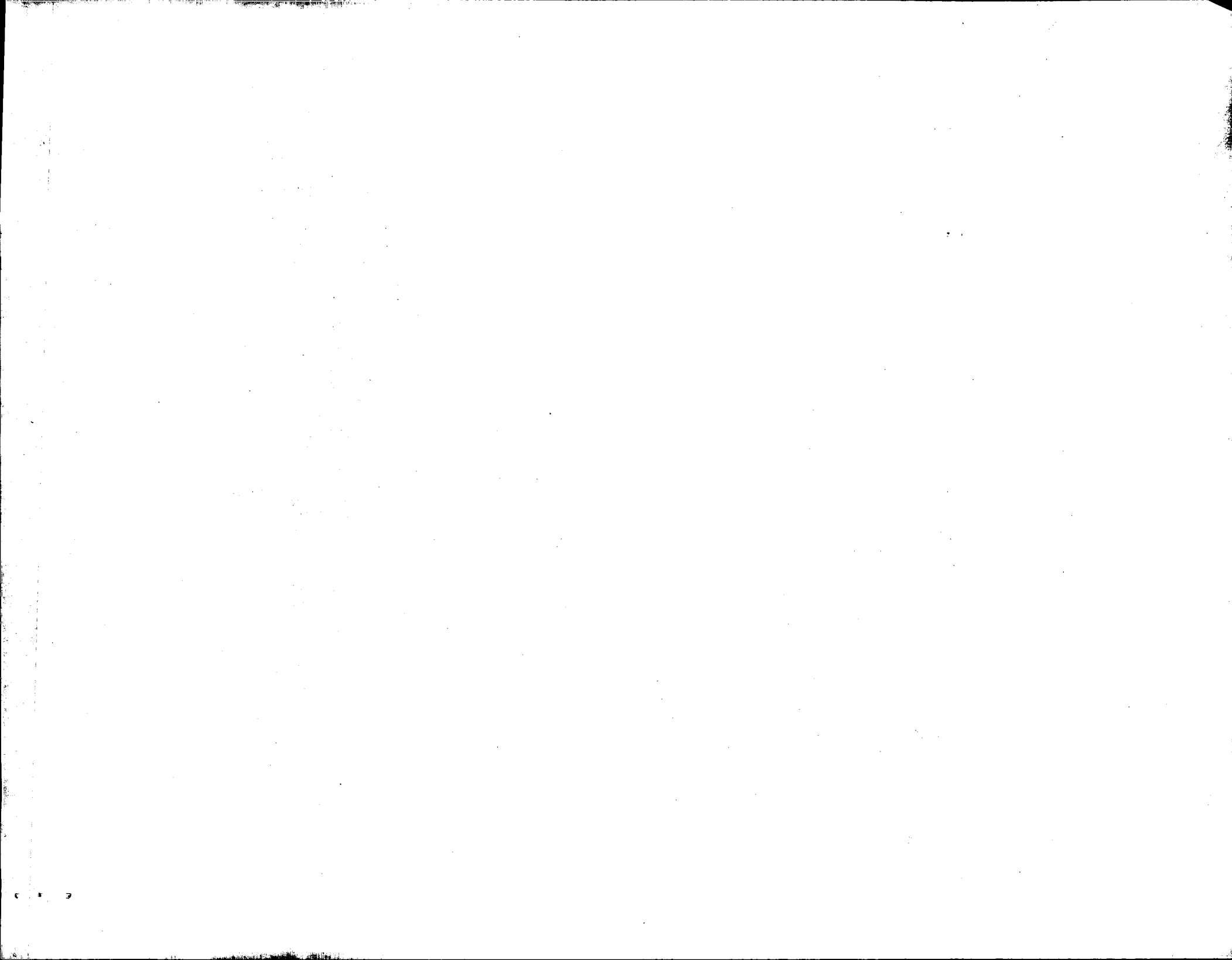
☒ **First Article**

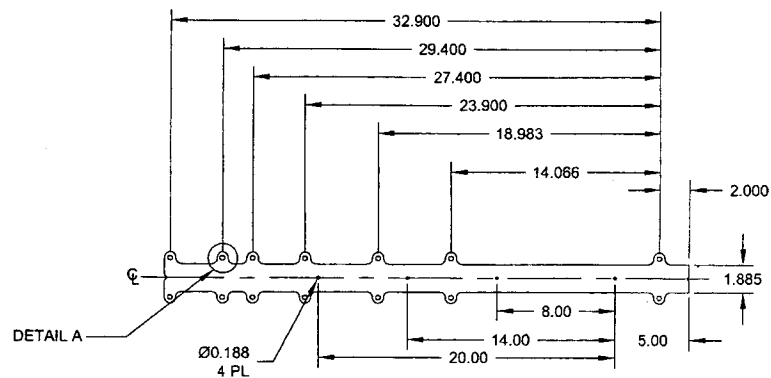
 ☐ **Prototype**

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.188	+0.005/-0.001	0.190"	✓		V	Mma1
0.300 x 0.300	+/-0.010	0.302 x 0.304	✓		V	
1.885	+/-0.010	1.890"	✓		V	
2.000	+/-0.010	2.005"	✓		V	
5.00	+/-0.030	5.002"	✓		V	
8.00	+/-0.030	7.995"	✓		V	
14.00	+/-0.030	14.00"	✓		T	HBo1
20.00	+/-0.030	20.00"	✓		T	
14.066	+/-0.010	14.066"	✓		T	
18.983	+/-0.010	18.983"	✓		T	
23.900	+/-0.010	23.900"	✓		T	
27.400	+/-0.010	27.400"	✓		T	
29.400	+/-0.010	29.400"	✓		T	
32.900	+/-0.010	32.900"	✓		T	
0.040	+/-0.010	0.034"	✓		V	

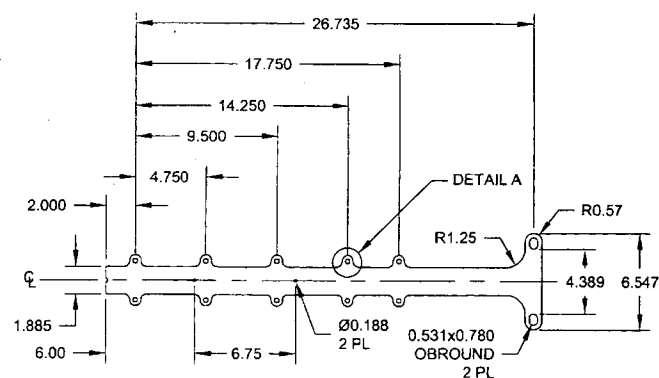
Measured by: Jm	Audited by: SmB	Prototype Approval:	N/A
Date: 12-9-15	Date: 12/9/17	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	08.05.30	New Issue	KJ/DD	

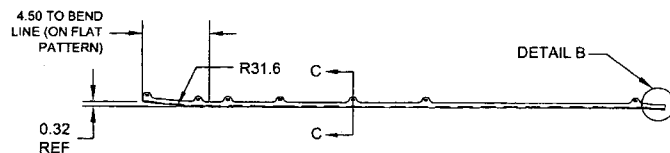




D3793-1F FLAT PATTERN



D3793-3F FLAT PATTERN



D3793-1 BEND DETAIL
(MAKE FROM D3793-1F)



D3793-3 BEND DETAIL
(MAKE FROM D3793-3F)

89999
PL 120413

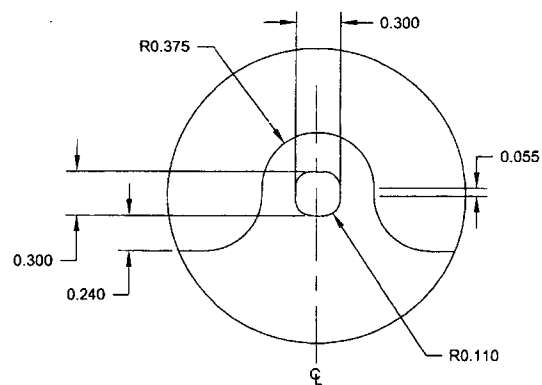
RELEASED
08.05.14

NOTES:

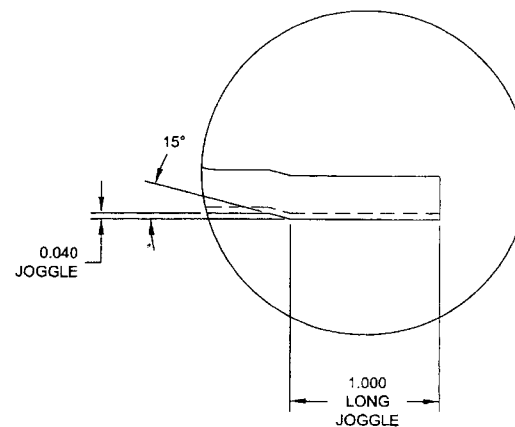
- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 20 GAUGE (0.038 THICK)
(REF DART SPEC M304S20GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "DXXXX-X" ON INSIDE SURFACE USING FINE POINT PERMANENT INK MARKER OR LABEL AFTER FINISH
- 7) WEIGHT: D3793-1 - 0.72 LBS, D3793-3 - 0.66 LBS

A	NEW ISSUE	PH	08.05.14
REV.	DESCRIPTION	BY	DATE
DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3793	SHEET 1 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
DATE	08.05.14	<small>COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

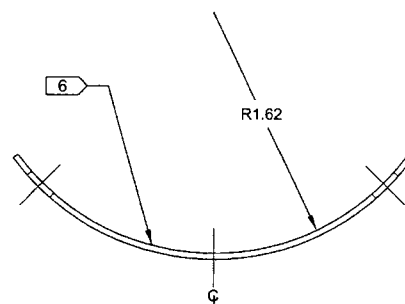
8 7 6 5 4 3 2 1



DETAIL A
SCALE 10X



DETAIL B
SCALE 10X



SECTION C-C
SCALE 10X

8999

RELEASED
08-05-14

DESIGN	PH	DART AEROSPACE USA, INC	
DRAWN	PH	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3793	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		WEARSHOE	NTS
DATE	08.05.14	COPYRIGHT © 2008 BY DART AEROSPACE USA, INC THIS DOCUMENT IS PROPRIETARY AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

8 7 6 5 4 3 2 1

